

#### Senate Bill 487:

## Impact on Medical Liability and Access to Healthcare

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On Behalf of: Oregon Liability Reform Coalition

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#### **Overview of Presentation**

- 1) Scope and Overall Results
- 2) Empirical Data
- 3) Access to Healthcare
- 4) Other Considerations
- 5) Appendix Monte Carlo Simulation Model



# Topic 1: Scope and Overall Results

#### **Scope of Analysis**

- Effect on Prospective Medical Liability Indemnity and Claim Expense Payments
  - Average Indemnity and Expense per Claim
  - Number of claims
- Provide Empirical Data Based on Oregon and Other States
- Summarize Reports on Access to Healthcare



#### **Overall Results**

- 20% Increase in Average Indemnity per Wrongful Death Claim
- 15% Increase in Wrongful Death Costs Due to Additional Claims
- Overall Impact Expected to be a 38% Increase in Wrongful Death Costs\*

\*Calculated as (1 + 20%) x (1 + 15%)



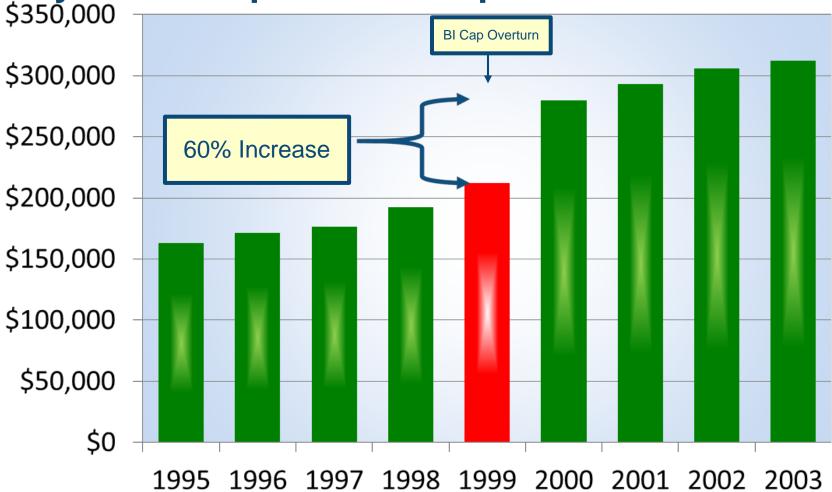
## Data Underlying Statistical Model of Oregon Medical Liability Claims

- Based on Oregon Closed Claim Data
- Data Provided by Three Largest Providers of Medical Liability Coverage in Oregon
- 18,000+ claims over 15+ years
- 25+ fields maintained in database
- Resulting model yielded a process with 100,000 simulated occurrences of medical misadventure



**Topic 2: Empirical Data** 

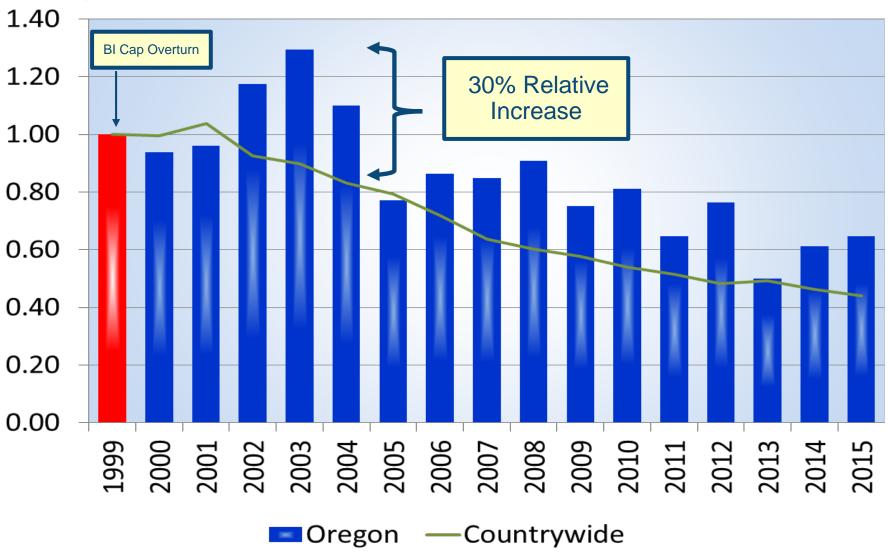
## Oregon Average Medical Liability Indemnity Payment – Impact of BI Cap Overturn in 1999



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File.



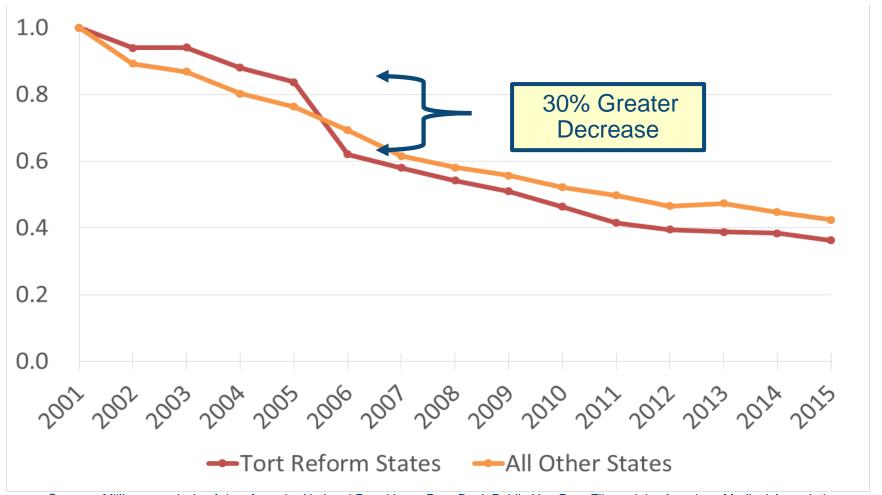
#### Oregon Claim Frequency Relative to Countrywide



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File and the American Medical Association.



### Claim Frequency of the Seven States Implementing Tort Reform 2003 – 2005 Relative to All Others



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File and the American Medical Association.

Tort reform states are Florida, Mississippi, Nevada, Oklahoma, South Carolina, and Texas.

Data normalized to 2001.



# Topic 3: Access to Healthcare

#### **Caps Improve Physician Supply**

"The adoption of 'direct' malpractice reforms led to greater growth in the overall supply of physicians."

Source: Kessler, Daniel P., William M. Sage, and David J. Becker. 2005. "Impact of Malpractice Reforms on the Supply of Physician Services," JAMA. Vol. 293(21):2618-2625. doi:10.1001/jama.293.21.2618.



## Caps Improve Access to High-Risk Specialists

"[...] Evidence clearly indicates an increase in physicians in high risk specialties after the adoption of noneconomic damage caps [...]."

Source: Helland, Eric and Seth A. Seabury. 2014. "Tort Reform and Physician Labor Supply: A Review of the Evidence," RAND Institute for Civil Justice.



#### **Caps Improve Access to Surgical Providers**

"Malpractice insurance premiums are a significant deterrent for surgeons.... In addition, caps on malpractice damage awards attract surgeons to areas."

Source: Chou, C. F. and A. T. Lo Sasso. 2009. "Practice Location Choice by New Physicians: The Importance of Malpractice Premiums, Damage Caps, and Health Professional Shortage Area Designation," Health Services Research, Vol. 44: 1271–1289. doi: 10.1111/j.1475-6773.2009.00976.x.



#### **Caps Improve Access to Obstetricians**

"The supply of obstetrician-gynecologists decreased by 8 percent in the three years following premium increases in 1999."

Source: Mello, Michelle M., David M. Studdert, Jennifer Schumi, Troyen A. Brennan and William M. Sage. 2007. "Changes In Physician Supply And Scope Of Practice During A Malpractice Crisis: Evidence From Pennsylvania," Health Affairs. Vol. 26, no.3:w425-w435 (published online April 24, 2007; 10.1377/hlthaff.26.3.w425).



### Caps Improve Access to Specialists in Rural Areas

"Caps appear to increase the supply of frontier rural, specialist physicians by 10-12 percent."

Source: Matsa, David A. 2007. "Does Malpractice Liability Keep the Doctor Away? Evidence from Tort Reform Damage Caps," Journal of Legal Studies. Vol 36(2):S143-S182.



# **Topic 5: Other Considerations**

#### **Other Considerations**

- Oral Discussion This document is not complete without the accompanying oral discussion and explanation of the underlying projections, results and variability.
- **Limited Distribution** This document should not be distributed, disclosed, or otherwise furnished, in whole or in part, without the express written consent of Milliman.
- Reliance on Data In performing this analysis, we relied upon data provided by others, as documented throughout this presentation. We performed a limited review of the data used directly in our analysis for reasonableness and consistency. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a detailed review was beyond the scope of our assignment.



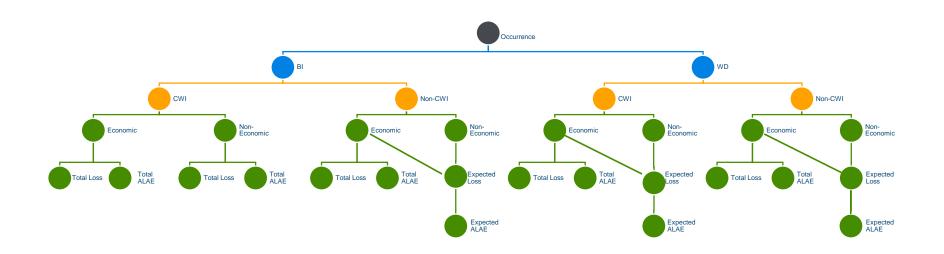
# **Appendix: Monte Carlo Simulation Model**

## Overview of Simulation Model Oregon Medical Liability Claims

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## Overview of Simulation Model Steps of Simulation Process



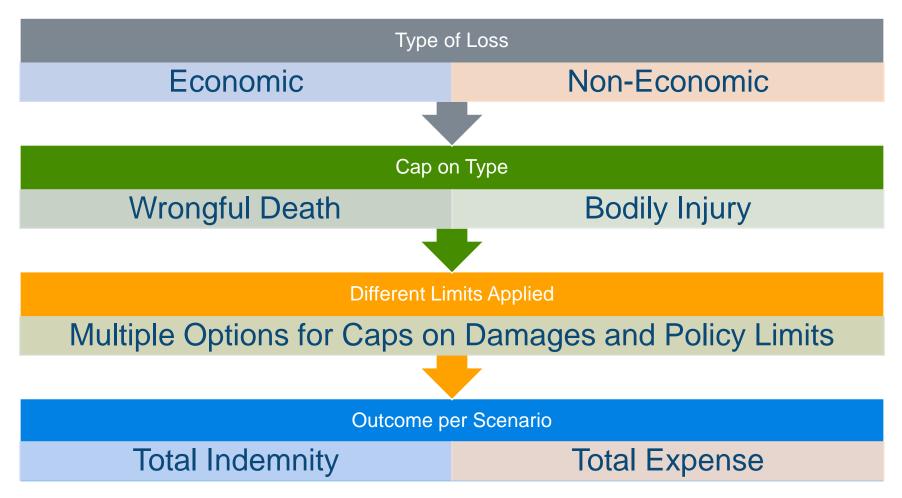


### Overview of Simulation Model Occurrence of Medical Misadventure

**Underlying Allegation Bodily Injury** Wrongful Death **Number of Claims Bodily Injury** Wrongful Death Outcome Indemnity Payment No Indemnity

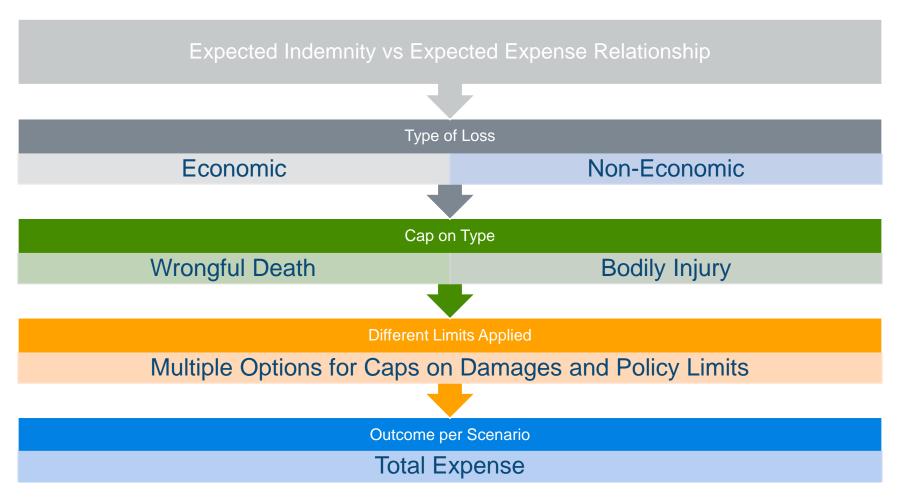


## Overview of Simulation Model Claims with Indemnity Payment





## Overview of Simulation Model Claims Closed with Expense Only





#### Reasonability Tests of Simulation Model

- Tests against the Oregon Closed Claim Data
  - > Test 1: Portion of claims by type
  - Test 2: Modeled severity versus calculated severity
  - ➤ Test 3: Average indemnity severity limited to \$1,000,000\*
  - Test 4: Average expense per claim closed with indemnity
  - Test 5: Average expense per claim closed with expense only
  - Tests 2 through 5 performed separately for Bodily Injury and Wrongful Death claims
- Objective was to Balance the Results from All the Tests Simultaneously

<sup>\*</sup>Chosen based on typical minimum policy limit of \$1,000,000 per claim.





### Thank you

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